

Comparisons of Job Characteristics

Focus Occupation: Life, Physical, and Social Science Technicians, All Other (19-4099)

Associated Occupation: Physical Scientists, All Other (19-2099)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 65

Focus Occupation: Life, Physical, and Social Science Technicians, All Other (19-4099)

Associated Occupation: Physical Scientists, All Other (19-2099)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Geography	3.9	21.7	10.9	<<	Extensive education and/or training may be required
Computers and Electronics	8.4	17.9	15.0	<	Expanded education and/or training may be required
Mathematics	9.2	16.2	12.8	<<	Extensive education and/or training may be required
Engineering and Technology	5.7	12.4	9.2	<<	Extensive education and/or training may be required
Physics	4.3	11.9	5.9	<<	Extensive education and/or training may be required
Biology	3.7	9.4	10.6	>	Current knowledge level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 74

Focus Occupation: Life, Physical, and Social Science Technicians, All Other (19-4099)

Associated Occupation: Physical Scientists, All Other (19-2099)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Reading Comprehension	10.7	14.9	12.0	<	A higher skill level may be required
Writing	9.2	13.9	10.7	<<	Extensive development of skills in this area may be required
Complex Problem Solving	9.1	13.3	9.7	<<	Extensive development of skills in this area may be required
Science	4.5	13.2	9.0	<<	Extensive development of skills in this area may be required

Mathematics	6.2	12.2	9.0	<<	Extensive development of skills in this area may be required
Operations Analysis	5.0	11.6	7.3	<<	Extensive development of skills in this area may be required
Systems Analysis	6.5	11.4	9.2	<	A higher skill level may be required
Systems Evaluation	6.4	10.1	8.3	<	A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 92

Focus Occupation: Life, Physical, and Social Science Technicians, All Other (19-4099)

Associated Occupation: Physical Scientists, All Other (19-2099)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Comprehension	11.0	15.1	12.2	<	Some improvement in abilities may be required
Deductive Reasoning	10.6	14.4	12.0	<	Some improvement in abilities may be required
Inductive Reasoning	10.2	13.8	11.8	<	Some improvement in abilities may be required
Written Expression	9.8	13.6	11.8	<	Some improvement in abilities may be required
Problem Sensitivity	11.1	13.5	11.6	<	Some improvement in abilities may be required
Mathematical Reasoning	6.3	13.0	10.1	<<	Extensive improvement in abilities may be required
Information Ordering	9.9	12.5	11.1	<	Some improvement in abilities may be required
Number Facility	6.3	11.2	8.8	<	Some improvement in abilities may be required
Category Flexibility	9.0	11.1	10.7	0	Current ability level may be sufficient
Flexibility of Closure	7.8	10.6	9.7	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

There are no common work activities.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 85

Focus Occupation: Life, Physical, and Social Science Technicians, All Other (19-4099)

Associated Occupation: Physical Scientists, All Other (19-2099)

Tools and Technologies	Exclusivity
Business function specific software	1
Cameras	2
Computers	1

Content authoring and editing software	1
Development software	4
Industry specific software	1
Information exchange software	1
Light and wave generating and measuring equipment	4
Network applications software	1
Operating environment software	12
Radar and sonar systems and components	24
Spectroscopic equipment	10

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.